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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
09/726,685	11/30/2000	John-Gy Lee	678-533 (P9005) 1390	
7590 01/20/2004		EXAMINER		
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			2682	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/726,685	LEE, JOHN-GY
Office Action Summary	Examiner	Art Unit
	Marceau Milord	2682
The MAILING DATE of this communication appearing for Reply	pears on the cover sheet with the o	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.  - after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute  - Any reply received by the Office later than three months after the mailin  earned patent term adjustment. See 37 CFR 1.704(b).  Status	136(a). In no event, however, may a reply be tingly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).
1) Responsive to communication(s) filed on 23 S	September 2003.	
2a) ☐ This action is FINAL. 2b) ☑ This	action is non-final.	
3) Since this application is in condition for allowa closed in accordance with the practice under the condition of the con		
Disposition of Claims		
4)⊠ Claim(s) <u>1 and 3-10</u> is/are pending in the appl	lication.	
4a) Of the above claim(s) is/are withdra	wn from consideration.	
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1 and 3-10</u> is/are rejected.		
7) ☐ Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/o	or election requirement.	
Application Papers		
9)☐ The specification is objected to by the Examine	er.	
10)☐ The drawing(s) filed on is/are: a)☐ acc	cepted or b) objected to by the	Examiner.
Applicant may not request that any objection to the	• , ,	• •
Replacement drawing sheet(s) including the correc	, , ,	·
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached Office	e Action or form PTO-152.
Priority under 35 U.S.C. §§ 119 and 120		
12) △ Acknowledgment is made of a claim for foreigna) △ All b) □ Some * c) □ None of:  1. △ Certified copies of the priority document 2. □ Certified copies of the priority document 3. □ Copies of the certified copies of the priority application from the International Burea	ts have been received. ts have been received in Applicat ority documents have been receive	ion No
* See the attached detailed Office action for a list 13) Acknowledgment is made of a claim for domest since a specific reference was included in the fir 37 CFR 1.78.	of the certified copies not receive ic priority under 35 U.S.C. § 119( est sentence of the specification o	e) (to a provisional application) r in an Application Data Sheet.
<ul> <li>a)</li></ul>	ic priority under 35 U.S.C. §§ 120	and/or 121 since a specific
Attachment(s)		
Notice of References Cited (PTO-892)		(PTO-413) Paper No(s)
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) B) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _		Patent Application (PTO-152)

### DETAILED ACTION

### Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 5-7, 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al (US Patent No 5943628) in view of McCarthy (US Patent No 5373548) and Kita (US Patent No 6263218 B1).

Regarding claim 1, Barrett et al discloses an apparatus for preventing the loss of a portable telephone (figs. 6-7; col. 1, lines 6-27), comprising: a master communication system (16 of fig. 6) provided by said portable telephone and having a first short-range radio communication module (74 of fig. 6) and a first control section (72 of fig. 6; col. 3, lines 50-61; col. 4, lines 43-45) and a slave communication system (46 of fig. 6) having a second short-range radio communication module (54 of fig. 6; col. 3, lines 34-44; col. 4, lines 43-45), wherein said first control section (72 of fig. 6) transmits a warning sound signal to the slave communication system (46 of fig. 6) to generate a specified warning sound (81 of fig. 6, step108 of fig. 7, step 204 of

fig. 11) when said first control section (72 of fig. 6) determines a distance (46 of fig. 6; figs. 8-11; col. 1, lines 41-57; col. 3, line 62- col. 4, line 21; col. 4, line 43- col. 5, line 17; col. 7, lines 11-24).

However, Barrett et al does not specifically disclose the feature of a control section that determines the distance between the master communication system and the slave communication system, which is greater than a predetermined range. Also a wearable earphone, which includes a speaker and a microphone to facilitate hands-free communication.

On the other hand, McCarthy, from the same field of endeavor, discloses a cordless telephone having a handset and a base unit. The signal strength of a handset, which is received by the base unit, is examined to determine whether or not the handset is beyond a predetermined range from the base unit. If such determination of out of range is made, a warning signal is transmitted from the base unit to the handset (col. 1, lines 56-68; col. 2, lines 1-13; col. 2, lines 29-53; col. 3, lines 8-65). Since the base unit comprises a carrier level detect circuit that can determine the path of the carrier signal received from the portable unit, then the base unit can issue a warning signal to the outgoing signal via the transceiver to the portable unit for indicating the out-of range status. It is considered that the control section determines a distance between the master communication system and the slave communication system.

Kita also discloses an incoming calling system that can notify the user of the incoming to a radio portable terminal of a mobile communication unit without disturbing others and decrease the probability of erroneous notification. For instance, when the portable telephone receives an incoming call signal from a base station, it generates a speech signal of an incoming tone and the speech signal is input to the incoming notification signal transmitter through the earphone-

microphone terminal to detect incoming. The incoming notification signal transmitter is constituted to generate incoming notification signal, transmit the signal to a card-type incoming notification signal receiver or a wrist-type incoming notification signal receiver by radio, and notify the user of incoming at portable telephone side by vibration or a sound output buzzer (figs. 1-2, fig. 4, figs. 23-25; col. 2, lines 26-57; col. 4, lines 16-64; col. 11, line 36- col. 12, line 29; col. 22, lines 34-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Kita to the modified system of McCarthy and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Regarding claim 3, Barrett et al as applied to claim 1 above differ from claim 3 in the present invention in that, Barrett does not specifically disclose the feature of control section that determines the distance between the master communication system and the slave communication system which is greater than said predetermined range.

However, McCarthy discloses a cordless telephone having a handset and a base unit. The signal strength of a handset, which is received by the base unit, is examined to determine whether or not the handset is beyond a predetermined range from the base unit. If such determination of out of range is made, a warning signal is transmitted from the base unit to the handset (col. 1, lines 56-68; col. 2, lines 1-13; col. 2, lines 29-53; col. 3, lines 8-65). Since the base unit comprises a carrier level detect circuit that can determine the path of the carrier signal received from the portable unit, then the base unit can issue a warning signal to the outgoing signal via the transceiver to the portable unit for indicating the out-of range status. It is considered that the control section determines a distance between the master communication

system and the slave communication system. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of McCarthy to the modified system of Kita and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Regarding claim 5, Barrett et al discloses a control method for preventing the loss of a portable telephone (figs. 6-7; col. 1, lines 6-27), the method comprising the steps of: determining (72 of fig. 6) whether a calling state exists between the portable telephone and the earphone (col. 4, lines 29-45; col. 7, lines 10-34); transmitting (72 of fig. 6) a warning sound signal to the earphone and the calling state between the portable telephone and the earphone is detected (the belt clip proximity unit 46 contains a transceiver 54 with means which can be worn or carried by a user, such as a hearing aid, etc, therefore, it is considered as earphone; see col. 2, lines 2-6; col. 4, lines 24-41; col. 4, line 47- col. 5, line 12; col. 7, lines 29 - 41); and generating (52 of fig. 6) a warning sound in the earphone if the warning sound signal is received from the portable telephone (col. 4, line 43- col. 5, line 17; col. 5, lines 31-60).

However, Barrett et al does not specifically disclose the step of periodically measuring a power level of a radio frequency received from an earphone when a loss prevention mode is determined in the portable telephone and transmitting a warning sound signal to the earphone if the power level of the radio frequency received from the earphone is below a predetermined level. Also an earphone, which includes a speaker, and a microphone that facilitate wireless operation of the portable telephone in a hands-free mode.

On the other hand, McCarthy, from the same field of endeavor, discloses a cordless telephone having a handset and a base unit. McCarthy teaches that the base unit measures the RF

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signal level received from the handset and provides a warning tone at the earpiece of the portable handset if the RF signal level is below a minimum operating threshold level. Furthermore, the signal strength of a handset, which is received by the base unit, is examined to determine whether or not the handset is beyond a predetermined range from the base unit. If such determination of out of range is made, a warning signal is transmitted from the base unit to the handset (col. 1, lines 56-68; col. 2, lines 1-13; col. 2, lines 29-53; col. 3, lines 8-65). Since the base unit comprises a carrier level detect circuit that can determine the path of the carrier signal received from the portable unit, then the base unit can issue a warning signal to the outgoing signal via the transceiver to the portable unit for indicating the out-of range status.

Kita also discloses an incoming calling system that can notify the user of the incoming to a radio portable terminal of a mobile communication unit without disturbing others and decrease the probability of erroneous notification. For instance, when the portable telephone receives an incoming call signal from a base station, it generates a speech signal of an incoming tone and the speech signal is input to the incoming notification signal transmitter through the earphone-microphone terminal to detect incoming. The incoming notification signal transmitter is constituted to generate incoming notification signal, transmit the signal to a card-type incoming notification signal receiver or a wrist-type incoming notification signal receiver by radio, and notify the user of incoming at portable telephone side by vibration or a sound output buzzer (figs. 1-2, fig. 4, figs. 23-25; col. 2, lines 26-57; col. 4, lines 16-64; col. 11, line 36- col. 12, line 29; col. 22, lines 34-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Kita to the modified system of

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McCarthy and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Regarding claim 6, Barrett et al as applied to claim 5 above differ from claim 6 in the present invention in that, Barrett does not specifically disclose the step of the portable telephone generating the warning sound if the power level of the radio frequency received from the earphone is below the predetermined level.

However, McCarthy discloses a cordless telephone having a handset and a base unit. In addition, McCarthy teaches that the base unit measures the RF signal level received from the handset and provides a warning tone at the earpiece of the portable handset if the RF signal level is below a minimum operating threshold level. Furthermore, the signal strength of a handset, which is received by the base unit, is examined to determine whether or not the handset is beyond a predetermined range from the base unit. If such determination of out of range is made, a warning signal is transmitted from the base unit to the handset (col. 1, lines 56-68; col. 2, lines 1-13; col. 2, lines 29-53; col. 3, lines 8-65). Since the base unit comprises a carrier level detect circuit that can determine the path of the carrier signal received from the portable unit, then the base unit can issue a warning signal to the outgoing signal via the transceiver to the portable unit for indicating the out-of range status. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of McCarthy to the modified system of Kita and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Regarding claim 7, Barrett et al as applied to claim 5 above differ from claim 7 in the present invention in that, Barrett does not specifically disclose the step of the portable telephone

periodically measuring the power level of the radio frequency received from the earphone when a hands-free mode is determined in the portable telephone.

However, McCarthy discloses a cordless telephone having a handset and a base unit. In addition, McCarthy teaches that the base unit measures the RF signal level received from the handset and provides a warning tone at the earpiece of the portable handset if the RF signal level is below a minimum operating threshold level. Furthermore, the signal strength of a handset, which is received by the base unit, is examined to determine whether or not the handset is beyond a predetermined range from the base unit. If such determination of out of range is made, a warning signal is transmitted from the base unit to the handset (col. 1, lines 56-68; col. 2, lines 1-13; col. 2, lines 29-53; col. 3, lines 8-65). Since the base unit comprises a carrier level detect circuit that can determine the path of the carrier signal received from the portable unit, then the base unit can issue a warning signal to the outgoing signal via the transceiver to the portable unit for indicating the out-of range status. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of McCarthy to the modified system of Kita and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Regarding claim 9, Barrett et al as applied to claim 5 above differ from claim 9 in the present invention in that, Barrett does not specifically disclose the step of generating said warning signal, via said portable telephone, when the distance between the portable telephone and the earpiece is greater than a predetermined range and no radio communication exists there between

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However, McCarthy discloses a cordless telephone having a handset and a base unit. The signal strength of a handset, which is received by the base unit, is examined to determine whether or not the handset is beyond a predetermined range from the base unit. If such determination of out of range is made, a warning signal is transmitted from the base unit to the handset (col. 1, lines 56-68; col. 2, lines 1-13; col. 2, lines 29-53; col. 3, lines 8-65). Since the base unit comprises a carrier level detect circuit that can determine the path of the carrier signal received from the portable unit, then the base unit can issue a warning signal to the outgoing signal via the transceiver to the portable unit for indicating the out-of range status. It is considered that the control section determines a distance between the master communication system and the slave communication system. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of McCarthy to the modified system of Kita and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Regarding claim 10, Barrett et al discloses an apparatus for preventing the loss of a portable telephone (figs. 6-7; col. 1, lines 6-27), comprising: a master communication system (16 of fig. 6; col. 4, lines 43-49) provided by said portable telephone and having a short-range radio communication module (74 of fig. 6); and a slave communication system (46 of fig. 6) having another short-range radio communication module (54 of fig. 6; col. 3, lines 34-44; col. 4, lines 43-45) which is different from the short-range radio communication module of the master so that the slave performs a blue tooth communication with the master (col. 6, lines 33-49); wherein if it is detected that the master transmits a warning sound signal to the slave to generate a specified warning sound ( figs. 8-11; col. 4, line 43- col. 5, line 15; col. 5, lines 31-51; col. 7, lines 11-24).

However, Barrett et al does not specifically disclose the step of detecting a distance between the master and the slave that is greater than a predetermined range. Also a wearable earphone, which includes a speaker and a microphone to facilitate hands-free communication.

On the other hand, McCarthy, from the same field of endeavor, discloses a cordless telephone having a handset and a base unit. McCarthy teaches that the base unit measures the RF signal level received from the handset and provides a warning tone at the earpiece of the portable handset if the RF signal level is below a minimum operating threshold level. Furthermore, the signal strength of a handset, which is received by the base unit, is examined to determine whether or not the handset is beyond a predetermined range from the base unit. If such determination of out of range is made, a warning signal is transmitted from the base unit to the handset (col. 1, lines 56-68; col. 2, lines 1-13; col. 2, lines 29-53; col. 3, lines 8-65). Since the base unit comprises a carrier level detect circuit that can determine the path of the carrier signal received from the portable unit, then the base unit can issue a warning signal to the outgoing signal via the transceiver to the portable unit for indicating the out-of range status. It is considered that the control section determines a distance between the master communication system and the slave communication system.

Kita also discloses an incoming calling system that can notify the user of the incoming to a radio portable terminal of a mobile communication unit without disturbing others and decrease the probability of erroneous notification. For instance, when the portable telephone receives an incoming call signal from a base station, it generates a speech signal of an incoming tone and the speech signal is input to the incoming notification signal transmitter through the earphone-microphone terminal to detect incoming. The incoming notification signal transmitter is

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constituted to generate incoming notification signal, transmit the signal to a card-type incoming notification signal receiver or a wrist-type incoming notification signal receiver by radio, and notify the user of incoming at portable telephone side by vibration or a sound output buzzer (figs. 1-2, fig. 4, figs. 23-25; col. 2, lines 26-57; col. 4, lines 16-64; col. 11, line 36- col. 12, line 29; col. 22, lines 34-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Kita to the modified system of McCarthy and Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

Claims 4, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al (US Patent No 5943628) in view of McCarthy (US Patent No 5373548) and Kita (US Patent No 6263218 B1) as applied to claims 1 and 5 above, and further in view of Novakov (US Patent No 6650871 B1).

Regarding claims 4 and 8, Barrett, McCarthy and Kita disclose everything claimed as explained above except the feature of a BLUETOOTH communication protocol.

However, Novakov shows in figure 1, a first wireless Pico net 150 that comprises one or more conventional Pico net enabled devices 110-114, as well as a Pico net enabled cordless telephone base unit 100a. The Pico net devices 100a, 110, 112 and 114 all communicate with one another based on known Pico net techniques using Bluetooth protocols. Similarly, Pico net devices 100b, 120, 122 and 124 all communicate with one another using compatible Pico net techniques using Bluetooth protocols (col. 3, line 28- col. 4, line 50; col. 6, lines 11-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

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was made to apply the technique of Novakov to the modified system of Kita, McCarthy and

Barrett in order to easily and simply identify the out-of-range status by a warning sound signal.

## Response to Arguments

2. Applicant's arguments with respect to claims 1, 3-10 have been considered but are moot in view of the new ground(s) of rejection.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 703-306-3023. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

MARCEAU MILORD

Marceau Milord Examiner Art Unit 2682